

Title (en)
THREAD WINDING DEVICE

Title (de)
VORRICHTUNG ZUM AUFSPULEN EINES FADENS

Title (fr)
DISPOSITIF D'ENROULEMENT DE FIL

Publication
EP 3689803 A4 20210526 (EN)

Application
EP 18863777 A 20180903

Priority
• JP 2017186609 A 20170927
• JP 2018032615 W 20180903

Abstract (en)
[origin: EP3689803A1] A yarn winding device configured to wind yarn onto a cone-shaped winding bobbin to form a cone-shaped package, the yarn winding device includes: a cradle configured to rotatably support the winding bobbin; a drive motor attached to the cradle and configured to rotate the winding bobbin; a traverse device configured to traverse the yarn; a package-peripheral-speed acquisition section configured to acquire, as a first peripheral speed, a peripheral speed of the winding bobbin; a touch roller configured to be rotated by rotation of the winding bobbin; a roller-peripheral-speed calculation section configured to calculate, as a second peripheral speed, a peripheral speed of the touch roller; and a contact-state determination section configured to compare the first peripheral speed acquired by the package-peripheral-speed acquisition section and the second peripheral speed calculated by the roller-peripheral-speed calculation section, thereby determining a contact state of the bobbin that is in contact with the touch roller.

IPC 8 full level
B65H 54/02 (2006.01); **B65H 54/10** (2006.01); **B65H 54/44** (2006.01); **B65H 63/00** (2006.01)

CPC (source: EP)
B65H 54/103 (2013.01); **B65H 54/44** (2013.01); **B65H 2701/31** (2013.01)

Citation (search report)
• [A] EP 2669229 A2 20131204 - MURATA MACHINERY LTD [JP]
• [A] DE 102015204302 A1 20150924 - MURATA MACHINERY LTD [JP]
• [A] EP 2690043 A2 20140129 - MURATA MACHINERY LTD [JP]
• See references of WO 2019065106A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
EP 3689803 A1 20200805; **EP 3689803 A4 20210526**; **EP 3689803 B1 20230222**; CN 111132918 A 20200508; CN 111132918 B 20210910; JP 2019059601 A 20190418; WO 2019065106 A1 20190404

DOCDB simple family (application)
EP 18863777 A 20180903; CN 201880061867 A 20180903; JP 2017186609 A 20170927; JP 2018032615 W 20180903